

# Depression in newly-urbanized elderly Africans

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## Abstract

*Two recent South African prevalence studies of depressive symptoms have revealed a high occurrence of such symptoms among the black elderly population, particularly in the case of women. In a study of depression conducted in the Cape Peninsula townships of Langa and Khayelitsha (N = 195 and 170, respectively), an alarming vulnerability to depressive symptoms was found among black elderly women, with 27 % of the women sampled in Langa and 44 % of those in Khayelitsha identifying with these symptoms. The Multidimensional Survey (N = 4 400) demonstrated a greater prevalence of depression among elderly blacks than among other elderly population groups. Possible reasons for these findings are discussed.*

Depression is the most common psychiatric disorder among elderly people. However not all depression amounts to serious mental illness. Nevertheless because depression affects the outlook and activities of afflicted persons, it causes them much suffering and can be most incapacitating. Reliable community surveys in the United Kingdom and the USA reveal a prevalence of depression in the elderly of between 12 and 18 % (Livingston, Hawkins, Graham *et al.*, 1990; Copeland, Dewey, Wood *et al.*, 1987; Roberts & Vernon, 1983; Weissman & Locke, 1975). Accurate estimates of depression among elderly black South Africans have not been available up to now.

The first large-scale epidemiological surveys of black elderly persons in South Africa have recently been completed. The prevalence of depression among two survey samples is reported in this article. Some effects of the stresses relating to urbanization on the prevalence rate of depression among these populations are also examined.

The first investigation was conducted in the black townships of Langa and Khayelitsha in the Western Cape in 1989 by the Medical Research Council's (MRC) Clinical Psychiatry Research Unit. The Multidimensional Survey (Ferreira, Møller, Prinsloo & Gillis, 1992) was conducted in 1990-91 by the Centre for Research on Ageing of the Human Sciences Research Council (HSRC).

The former study was specifically mounted to explore the differential effects of urbanization in a largely settled and relatively stable community (Langa), and in one to which the majority of the residents had migrated from the country or elsewhere within the last five years (Khayelitsha). The countrywide study included all population groups (N = 4 400). However only the findings pertaining to the urban black subsample (N = 1 000) are reported here.

## Methods

Both surveys sampled persons who were 60 years and older. Different instruments were used for the two surveys: The Short CARE scale (Gurland & Wilder, 1984), which elicits defined psychiatric symptoms, was used for the Langa/Khayelitsha study. The CES-D scale (Radloff, 1991) was used for the countrywide survey. The latter scale is mainly concerned with subjective responses. Both instruments are well validated and widely used.

In the Multidimensional Survey the CES-D scale was administered by interviewers from the regular HSRC MarkData panel who were all experienced in this type of investigation. Psychiatric nurses administered the questionnaire in the Langa/Khayelitsha survey. In both surveys the interviewers were rigorously trained and supervised. A great deal of care was taken with the translation of the items in the instruments and the interpretation of the responses.

The Short CARE instrument is concerned with symptoms occurring during the previous month, whereas the CES-D scale is concerned with symptoms occurring in the week prior to the interview. The latter scale consists of 20 items, with 16 negative responses recommended as a cut-off point for probable pathology. Two items were regarded as unsuitable for the South African population because of cultural differences (items 4 and 7); accordingly a threshold of 14 was used. Although the scale grades responses in degrees of severity, only "all" or "most of the time" answers were used in the analysis (Radloff, 1991).

The sampling procedure for the Langa/Khayelitsha study was devised by the MRC's Institute for Biostatistics. Samples of 195 and 170 respondents in the two townships, respectively, were decided upon as adequate to show up differences in the areas under investigation. Clusters of plots were demarcated on town plans and a simple random sample was drawn without replacement. All elderly persons in each selected cluster area were interviewed. Details of the sampling are given in the MRC Urbanisation and Health National Programme Technical Report (Barnes & Yach, 1991).

The sampling strategy for the Multidimensional Survey was designed and carried out by the Centre for Statistical Research of the HSRC, using the adjusted 1985 census figures. A multistage stratified cluster sampling method was used to draw a sample of 4 000 equally represented black, coloured, Indian and white persons who lived in urban areas countrywide. In addition an exemplary sample of 400 blacks who lived in deep-rural areas of two homelands (Kangwane and Lebowa) was drawn. The findings pertaining to the urban black subsample (N = 1 000) are focused on in this article.

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## Findings

The Short CARE assesses depression on two scales. The first scale pertains to the subjects' emotional and motivational states, vegetative symptoms and functional impairment. However it does not give a certain diagnosis of depression as some of the items are also found in other psychiatric disorders. What it does indicate is whether the person is significantly distressed and dysphoric, and therefore warrants further psychiatric investigation. On this scale a large difference was found between the Langa respondents, 21 % of whom showed depressive symptoms, and the Khayelitsha subjects, where 66 % had such symptoms. The other Short CARE scale gives a more precise indication of depression; because it has a high correlation with similar survey instruments (Weissman & Locke, 1975), it can be regarded as giving reliable results. The use of this scale confirmed that the prevalence of depression among elderly persons living in the community during the previous month was particularly high in Khayelitsha. The results are shown in Table 1.

**Table 1**  
Prevalence of depression in elderly persons in two townships (Langa, Khayelitsha): percentages of the sampled populations

	Langa %	Khayelitsha %
Men	13	27
Women	17	44
N	195	170

The results of the Langa study are similar to those of other surveys which have used the Short CARE scale (Livingston, Hawkins, Graham *et al.*, 1990; Copeland, Dewey, Wood *et al.*, 1987; Gurland & Wilder, 1984). Prevalence rates for other elderly populations obtained by the use of other ascertainment instruments, both in South Africa and abroad, are similar (Elk, Swartz & Gillis, 1983; Blazer & Williams, 1980). However the findings of the Khayelitsha sample reveal a far higher prevalence of depression, particularly among females, than all the other studies. See Table 2.

**Table 2**  
Comparison of prevalence of depression in five study samples: percentages

	Langa %	Khayelitsha %	Liverpool <sup>a</sup> %	London <sup>b</sup> %	New York <sup>c</sup> %
	14,9	36,9	11,3	17,4	12,9
N	195	170	1 070	813	283

- a Copeland *et al.* (1987)  
b Livingston *et al.* (1990)  
c Gurland & Wilder (1984)

In spite of the high prevalence of depressive symptoms in this investigation, only two women in Khayelitsha and one woman in Langa reported that they had received psychiatric

treatment. The rest suffered, if not in silence, at least without succour.

The countrywide survey using the CES-D scale provided an opportunity for valuable comparisons as it was also administered to other elderly South African population groups. The important finding here was that there is a markedly higher prevalence of *severe* depression among both urban and rural blacks, than among so-called coloureds, Indians and whites (compare the percentages below). A cut-off point of 14 was used to illustrate this difference. The same trend emerged for all degrees of dysphoria and depression.

Urban blacks	5,5 %
Rural blacks	4,9 %
Coloureds	1,9 %
Indians	2,6 %
Whites	0,2 %

These differences are supported by the findings on the average number of strongly negative responses to items on the scale, expressed as percentages of possible total responses and are shown below:

Urban blacks	22,0 %
Rural blacks	18,9 %
Coloureds	9,6 %
Indians	8,2 %
Whites	5,2 %

A noteworthy finding was the greater prevalence of subjective symptomatology in elderly women of all population groups, which accords with worldwide experience (Krause, 1986; Murrell, Himmelfarb & Wright, 1983). The difference in the proportion of such responses between men and women in the two black subsamples (urban and rural) in the countrywide survey was however exceptional. A method of highlighting these differences was devised by allocating one point to "rarely" or "hardly ever" responses and three points to "all" or "most of the time" responses. Since the CES-D consists of 18 items the minimum score for each population group is 18 points and the maximum score 54 points. See Figure 1.

An analysis was also made of a number of social and other factors in the Langa/Khayelitsha study relating to daily life in the townships and the results are reported elsewhere (Barnes & Yach, 1991). To determine the influence of these variables on the rates of depression, the variables that showed a significant relationship to symptomatology were further analysed by multivariate contingency tables analysis. The results confirmed that length of stay in Cape Town, gender, adequacy of housing and perceived state of health were significantly related to depressive symptoms. Further analysis by logistic regression resulted in a log-linear model of first and second order effects which supported these findings.

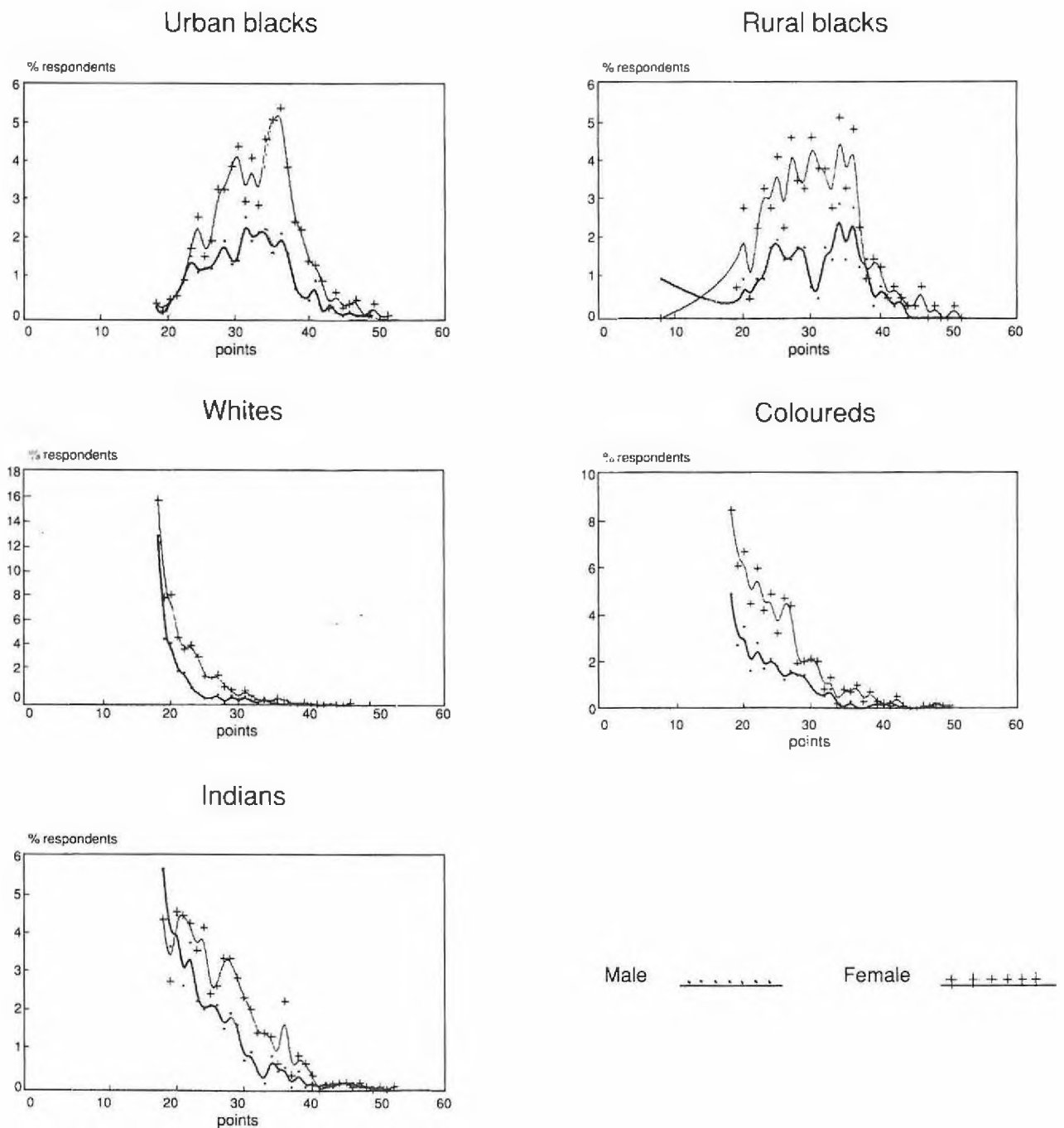
No physical examinations of the respondents nor medical investigations were made. An accurate estimate of physical ill-health, or the health status of the respondents, could not therefore be determined. However the dependency between psychological distress, particularly anxiety and depression, and complaints of subjective bodily dysfunction is well known. It can be inferred that at least some of the complaints of ill-health were due to this association.

## Discussion

It is not possible to compare the findings of the Langa/Khayelitsha survey with those of the countrywide investigation as different scales were used in the two surveys to measure depressive symptomatology. The corresponding value on the Short CARE scale, which would indicate a comparable degree of depression as measured by the cut-off

**Figure 1**

Gender differences in the rate of depressive symptomatology in the five subsamples of the countrywide survey



point of 14 on the CES-D scale, is not known. In addition, the duration of the ascertainment time periods differed, with the CES-D scale referring to the previous week and the Short CARE scale measuring symptoms over the previous month. However the CES-D scale has been satisfactorily tested against other measures (Weissman & Locke, 1975) and has been shown to identify 71 % of subjects with major depression (Roberts & Vernon, 1983). The Short CARE instrument also correlates highly with other reliable measures (Livingston, Hawkins, Graham *et al.*, 1990).

Taken together, both instruments make it clear that mild psychiatric and depressive symptoms are very common in black elderly persons in South Africa, particularly women. The question arises as to what extent such symptoms are simply manifestations of psychological distress and do not

indicate frank disorder. According to DSM-III-R (American Psychiatric Association, 1987) dysphoria in itself is not diagnostic of a depressive disorder, although it is mandatory for such diagnoses in association with other well defined symptoms. The matter has been argued in the literature (Bebbington, Tennant & Hurry, 1991; Brown, Craig & Harris, 1985). The general feeling is that, given a sufficiently stringent threshold of severity, depression as identified in community surveys can be regarded as a distinct clinical entity.

In the investigations there were many cases at the lower end of the spectrum where the term distress would be more appropriate; but there was also a hard core of really depressed people in both surveys. The proportion of those depressed people in the Langa investigation (14.9 %) is of the same magnitude as that found in overseas studies, for example

Murrell, Himmelfarb and Wright (1983) (13,7 % for males and 18,2 % for females), Blazer and Williams (1980) (14,7 %) and Frerich, Anesheusel and Clark (1983) (16,7 %). The figure for Khayelitsha, as shown in Table 2, is much higher (36,9 %) than that found in other studies. In respect of the countrywide survey no meaningful comparisons can be made with CES-D investigations elsewhere because of the different cut-off points and the sampling variabilities. It is clear however that the prevalence of depressive symptomatology among elderly black persons is considerably greater than that of the elderly of other South African population groups using the same ascertainment instrument and cut-off point. Possible reasons for such differences should be sought through an investigation of varying sociocultural factors.

Several explanations have been put forward for the higher prevalence of subjective symptoms and mild depressive disorders among women. It is generally accepted that psychosocial rather than psychobiological factors account for most of the difference between the sexes (Bebbington, Tennant & Hurry, 1991), but the exact causal circumstances are not clear. Brown and Harris (1978) consider that women experience more stressful life events than men; Pearlin and Johnson (1977) feel that women are exposed to more long-term stresses. Others feel that women are more willing to admit to symptoms, or that they report a significantly greater intensity of symptoms (Weissman & Klerman, 1977). This contention receives support from the finding that more serious forms of bipolar depressive illness which have a genetic rather than a stress basis have a more or less equal incidence in men and women. Krause (1986, 1988) found that mean differences in depressive symptoms between the sexes could largely be explained by the fact that, given equal exposure to stress, life events exert a more negative effect on elderly females, particularly the stress of ongoing financial difficulties. Men are certainly not exempt though, for it is a general finding that alcoholism and suicidal rates are much higher among older men than older women (Krause, 1988).

In the Langa/Khayelitsha investigation situational stress was undoubtedly a factor in the prevalence of depression, since the majority of the respondents lived in impoverished conditions and, often, with disorganized families. In Khayelitsha 98 % of the subjects lived in shacks, while the same proportion in Langa were living in substantial permanent dwellings. Housing was rated as barely liveable or completely inadequate in the case of 65 % of the former subjects but only in the case of 11,9 % of the latter subjects (Barnes & Yach, 1991). Financial stress was generally a problem as there is a high rate of unemployment among the township residents. A social old-age pension was the major resource of many families but while over 74 % of the elderly in Langa received a social pension, only 45 % of the elderly residents sampled in Khayelitsha did (Prinsloo, 1991).

Cultural factors certainly played a part. In the traditional South African context there is an ideology of male dominance and control (Ramphela & Boonzaier, 1988); although men are not free of the burden of providing, and those of pensionable age do receive a pension, they are not traditionally encumbered by the daily detail of household management. The domestic role of females continues among the elderly; where money and resources are limited, these scarcities are a constant worry for women.

Another stress affecting elderly women which was often mentioned by female respondents in the Langa/Khayelitsha study was that they were expected to look after grandchildren while the mother was at work; many found this to be a burden. In addition, in the transitional community of Khayelitsha older women have the added strain of acculturation, as most

have come from a rural village background and have little formal education. Only 5 % of the female respondents in Khayelitsha had completed primary school, compared with 27 % of the women in Langa. Fewer elderly women in Khayelitsha than in Langa spoke English or Afrikaans, the main languages in Cape Town. Nearly half did not know where to find a doctor, a clinic, a social worker or a traditional healer, compared with 13 % of the elderly women in Langa (Prinsloo, 1991). There did not appear to be any diminution of the respect that normally goes with being old in a traditional society.

Social support as a mitigating factor in respect of depressive symptomatology was not investigated in the present studies. However in a review of the literature, Krause (1988) states that research indicates that elderly women generally appear to receive more social support than elderly men. Despite this greater support, women appear to be more vulnerable to depressive symptoms than men. Krause (1988) suggests that this vulnerability may be because external support tends to erode feelings of personal control.

It was not possible to define precisely which of the many social circumstances that were present were critically relevant in respect of the marked differences in depressive symptomatology between Khayelitsha and Langa women, since most of the latter, although somewhat better off materially than those living in Khayelitsha, also lived in severely strained circumstances. Overall however, the women in Langa were more settled and familiar with community resources and services than their counterparts in Khayelitsha. The main difference between the two samples lay in respect of the recent translocation and the stresses of urbanization. This is supported by the finding of the countrywide survey that there was a significantly higher prevalence of depressive symptoms among urban elderly black persons than those living in rural areas ( $p < 0,01$ ).

## Conclusions

The impartial findings emerging from these surveys show that depressive symptomatology is more frequent in elderly black South Africans than in the other elderly population groups; the prevalence is greatest in elderly black women; and that there is a high prevalence among people living in the newly-settled community of Khayelitsha. The latter finding is significant: at the time of the investigation, Khayelitsha was a typical squatter settlement; the number of these settlements in South Africa is growing rapidly. The indications are that the stresses of urbanization are at least a contributory factor to the prevalence of depressive symptomatology among the elderly in these settlements. Further research is proceeding to determine the valency of specific life stresses and to identify appropriate intervention strategies that could be instituted to diminish the effects of the stressors.

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## References

- American Psychiatric Association. 1987. *Diagnostic and Statistical Manual of Mental Disorders. Edition III, Revised, (DSM-III-R.)* Washington.
- Barnes, J. & Yach, D. (Eds) 1991. *A survey of health aspects of black elderly living in a settled and a newly developed township in the Cape metropolitan area.* MRC Urbanisation and Health National Programme, Technical Report No. 11. Tygerberg, CP: Medical Research Council.

- Bebbington, D.E., Tennant, C. & Hurry, J. 1991. Adversity in groups with an increased risk of minor affective disorder. *British Journal of Psychiatry*, 158: 33-40.
- Blazer, D. & Williams, C.D. 1980. Epidemiology of dysphoria and depression in an elderly population. *American Journal of Psychiatry*, 137: 439-44.
- Brown, G.W. & Harris, T.O. 1978. *Social origins of depression*. London: Tavistock.
- Brown, G.W., Craig, Y.K.J. & Harris, T.O. 1985. Depression: distress or disease? *British Journal of Psychiatry*, 147: 612-22.
- Copeland, J.R.M., Dewey, M.R., Wood, N., Searle, R., Davidson, J.A. & MacWilliam, C. 1987. Range of mental illness among the elderly in the community. *British Journal of Psychiatry*, 150: 815-23.
- Elk, R., Swartz, L. & Gillis, L.S. 1983. The Coloured elderly in Cape Town – a psychosocial, psychiatric and medical community survey. *South African Medical Journal*, 64(26): 1017-22.
- Ferreira, M., Møller, V., Prinsloo, F.R. & Gillis, L.S. 1992. *Multidimensional survey of elderly South Africans, 1990-91: key findings*. Cape Town: HSRC/UCT Centre for Gerontology.
- Frerich, R.R., Anesheusel, C.S. & Clark, K.A. 1983. Prevalence of depression in LA County. *American Journal of Epidemiology*, 113: 691-99.
- Gurland, B. & Wilder, D.E. 1984. The Short CARE: an efficient instrument for the assessment of depression, dementia and disability. *Journal of Gerontology*, 39: 166-69.
- Krause, N. 1986. Stress and sex difference in depressive symptoms amongst older adults. *Journal of Gerontology*, 41: 727-31.
- Krause, N. 1988. Gender and ethnicity differences in psychological well-being. In: Maddox, G.L. & Lawton, M.P. (Eds) *Annual Review of Gerontology and Geriatrics*, 8: 156-86.
- Livingston, G., Hawkins, A., Graham, N., Blizard, B. & Mann, A. 1990. The Gospel Oak Study: prevalence rates of dementia, depression and activity limitation. *Psychological Medicine*, 20: 137-46.
- Murrell, S.A., Himmelfarb, S. & Wright, K. 1983. Prevalence of depression and its correlates in older adults. *Journal of Epidemiology*, 117(2): 173-85.
- Pearlin, L.I. & Johnson, J.S. 1977. Marital status, life stress and depression. *American Sociological Review*, 42: 704-15.
- Prinsloo, F.R. 1991. Health services – needs of the elderly in two black urban areas in the Cape Peninsula. *South African Medical Journal*, 79: 485-89.
- Radloff, L.S. 1991. The CES-D scale: a self-report depression scale for research in the general population. *Applied Psychological Measurement*, 1(3): 385-401.
- Ramphele, M. & Boonzaier, E. 1988. The position of African women: race and gender in South Africa. In: Boonzaier, E. & Sharp, J. *South African keywords*. Cape Town: David Philip.
- Roberts, R.E. & Vernon, S.W. 1983. The CES-D scale: its use in a community sample. *American Journal of Psychiatry*, 140: 41-46.
- Weissman, M.M. & Klerman, G.L. 1977. Epidemiology of mental illness: emerging trends in the United States. *Archives of General Psychiatry*, 34: 98-102.
- Weissman, M. & Locke, B.Z. 1975. Comparison of a self-report symptom rating scale with standardized rating scales in psychiatric populations. *American Journal of Epidemiology*, 102: 430-31.